

09/163925

METHOD AND SYSTEM OF ROUTING NETWORK-BASED
DATA USING FRAME ADDRESS NOTIFICATION

Abstract of the Disclosure

5 A method and system for routing network-based
data arranged in frames is disclosed. A host processor
analyzes transferred bursts of data and initiates an
address and look up algorithm for dispatching the frame
to a desired destination. A shared system memory
existing between a network device, e.g., an HDLC
controller, working in conjunction with the host
processor, receives data, including any preselected
10 address fields. The network device includes a
plurality of ports. Each port includes a FIFO receive
memory for receiving at least a first portion of a
frame. The first portion of the frame includes data
having the preselected address fields. A direct memory
15 access unit transfers a burst of data from the FIFO
receive memory to the shared system memory. A
communications processor selects the amount of data to
be transferred from the FIFO receive memory based on
the desired address fields to be analyzed by the host
20 processor.

SECRET